

Integral Equations and Operator Theory

Editor: I. Gohberg

**Vol. 17
1993**

Birkhäuser Verlag
Basel · Boston · Berlin

The journal appears bimonthly and is devoted to the publication of current research in integral equations, operator theory and related topics with emphasis on the linear aspects of the theory. The journal reports on the full scope of current developments from abstract theory to numerical methods and applications to analysis, physics, mechanics, engineering and others. The journal consists of two sections: a main section consisting of refereed papers and a second consisting of short announcements of important results, open problems, information, etc.

50 reprints of each paper will be supplied free of charge. Additional reprints cost per 50 copies:
1–2 pages sFr. 143.–, 3–4 pages sFr. 168.–, 5–8 pages sFr. 219.–, 9–12 pages sFr. 270.–, 13–16 pages sFr. 320.–. Prices for reprints exceeding 16 pages on request.

Manuscripts are reproduced directly by a photographic process, which excludes the possibility of subsequent alterations.

Authors are therefore requested when preparing manuscripts to observe the instructions printed at the end of the issue most carefully.

Copyright

It is a fundamental condition of publication that submitted manuscripts have not been published, nor will be simultaneously submitted or published elsewhere. By submitting a manuscript, the authors agree that the copyright for their article is transferred to the publisher if and when the article is accepted for publication. The copyright covers the exclusive rights to reproduce and distribute the article, including reprints, photographic reproductions, microform or any other reproductions of similar nature, and translations.

No material published in this journal may be reproduced photographically or stored on microfilm, in electronic data bases, video disks, etc., without first obtaining written permission from the publisher: Birkhäuser Verlag, P.O. Box 133, CH-4010 Basel/Switzerland.

For users in the USA:

The appearance of the code immediately before each article in this journal indicates the copyright owner's consent that copies of articles may be made for personal or internal use, or for the personal or internal use of specific clients. However, this consent is given on the condition that the copier pay the stated per copy fee through the Copyright Clearance Center, Inc., 21 Congress St., Salem, Mass. 01970, for copying beyond that permitted by Sections 107 or 108 of the U.S. Copyright Law. This consent does not extend to other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works, or for resale. For copying from back volumes of this journal see Permissions to Photo-Copy: Publisher's Fee List of the CCC.

Printed in Germany on acid-free paper produced from chlorine-free pulp

For users in Germany:

All rights reserved (including those of translation into foreign languages). No part of this journal may be reproduced in any form – by photoprint, microfilm, or any other means – nor transmitted or translated into a machine language without the written permission of the publishers. Only single copies of contributions, or parts thereof, may be reproduced for personal use. Copies reproduced and used for other than private purposes in an industrial or commercial undertaking are subject to copyright and, in such cases, a copyright fee must be paid to the VG WORT, Abteilung Wissenschaft, Goethestrasse 49, 80336 München, from whom conditions of payment can be obtained on request.

Subscription Information

This Journal appears in 2 volumes per year, 4 issues per volume.

Annual subscription:

sFr. 560.–/DM 658.–/US\$ 378.00,

postage not included.

Single issue.

sFr. 84.–/DM 102.–/US\$ 60.00,

postage not included.

Subscription orders should be placed with Birkhäuser Verlag, P.O. Box 133, CH-4010 Basel/Switzerland or through your bookseller or subscription agency.

Claims for undelivered issues must be made promptly – at the very latest, immediately following receipt of the issue succeeding the missing number. No cancellations are accepted for the calendar year once subscription has been entered. Cancellation of standing orders must be effected 3 months before the end of the publishing year.

<i>Alcántara-Bode, J.</i> : An integral equation formulation of the Riemann hypothesis . . .	151
<i>Arai, A.</i> : Characterization of anticommutativity of self-adjoint operators in connection with Clifford algebra and applications	451
<i>Bruzual, R.</i> : Unitary extensions of two-parameter local semigroups of isometric operators and the Krein extension theorem	301
<i>Cotlar, M., and Sadosky, C.</i> : Abstract, weighted, and multidimensional Adamjan-Arov-Krein theorems, and the singular numbers of Sarason commutants	169
<i>Curto, R.E., and Fialkow, L.A.</i> : Recursively generated weighted shifts and the subnormal completion problem	202
<i>Dewilde, P., and van der Veen, A.-J.</i> : On the Hankel-norm approximation of upper-triangular operators and matrices	1
<i>Dorfmeister, J.</i> : Groups associated with a Grassmannian modelled on the Wiener algebra	464
<i>Dubovoj, V.K., Fritzsche, B., and Kirstein, B.</i> : On spectrally associated Schur functions, Arov-inner functions and a Nehari-type completion problem for Schur functions	247
<i>Ghatage, P.G., and Zheng, D.</i> : Analytic functions of bounded mean oscillation and the Bloch space	501
<i>Gohberg, I., Krupnik, N., and Spitkovsky, I.</i> : Banach algebras of singular integral operators with piecewise continuous coefficients. General contour and weight . .	322
<i>Guinand, P.S., and Marcoux, L.</i> : On the $(\mathcal{U} + \kappa)$ -orbits of certain weighted shifts . .	516
<i>Hoh, W.</i> : Some commutator estimates for pseudo differential operators with negative definite functions as symbols	46
<i>Huang, D.</i> : Group inverses and Drazin inverses over Banach algebras	54
<i>Jacob, N., and Leopold, H.-G.</i> : Pseudo differential operators with variable order of differentiation generating Feller semigroups	544
<i>Katavolos, A., Lambrou, M.S., and Papadakis, M.</i> : On some algebras diagonalized by M-bases of ℓ^2	68
<i>Klůvánek, I., and Ricker, W.J.</i> : Spectral set functions and scalar operators	277
<i>Krupnik, I., Markus, A., and Matsaev, V.</i> : Factorization of matrix functions and characteristic properties of the circle	554
<i>Krupnik, N., and Spigel, E.</i> : Invertibility symbol for a Banach algebra generated by two idempotents and a shift	567
<i>Lancaster, P., Shkalikov, A., and Ye, Q.</i> : Strongly definitizable linear pencils in Hilbert space	338
<i>Lin, P., and Rochberg, R.</i> : The essential norm of Hankel operator on the Bergman space	361
<i>Linde, R.</i> : Integral operators of trace class	95
<i>Markus, A.S., and Olshevsky, V.R.</i> : Complete controllability and spectrum assignment in infinite dimensional spaces	107
<i>Nakamura, Y.</i> : One-dimensional perturbations of the shift	373
<i>Penzel, F.</i> : Sobolev space methods for the Laplace equation in the exterior of the disk	123
<i>Phillips, J., and Raeburn, I.</i> : Semigroups of isometries, Toeplitz algebras and twisted crossed products	579
<i>Saksman, E., and Tylli, H.-O.</i> : Compact and inessential perturbations of operators with closed range	404
<i>Voiculescu, D.</i> : Around quasidiagonal operators	137
<i>Xia, D.</i> : Trace formulas for a class of subnormal tuples of operators	417

Short Communications

<i>Bercovici, H., and Li, W.S.:</i> A near-factorization theorem for integrable functions .	440
<i>Matsaev, V., Spigel, E.:</i> Conditions for eigenvectors of a selfadjoint operator-function to form a basis	443